



Mechanical Engineering
Academy of Distinguished Alumni

Byron Elliott Short, Jr., Ph.D., P.E.

Distinguished Mechanical Engineer, 2007

BSME, The University of Texas at Austin, 1973
MSME & MSAeroE, University of Arizona, 1977
Ph.D., ME, SMU, 1994

Senior Engineering Fellow
Raytheon Company

Dr. Elliott Short grew up in the UT Mechanical Engineering Labs on the north side of Taylor Hall where his father, Dr. Byron E. Short, taught heat transfer, thermodynamics, fluid mechanics, and thermal sciences labs. He was introduced to heat exchangers, dynamometers, a foundry, machine shops, and a slide rule at an early age. He also attended UT football, baseball (at Clark Field), and basketball (at Gregory Gym) as early as he can remember.

Elliott graduated from UT in 1973 with a BSME and a commission in the U.S. Army Corps of Engineers. He was a Distinguished Military Graduate, a Cactus Outstanding Student, and was elected to Pi Tau Sigma, Tau Beta Pi, and Phi Kappa Phi. Elliott and his future wife, Carol, were also members of the Longhorn Band.

During 10 years on active duty, Elliott had tours in Missouri, Virginia, Korea, Texas, Hawaii and graduate school at the University of Arizona. Positions included combat engineer platoon and company command, engineer battalion maintenance officer, and assistant division engineer. As a project engineer in the Corps of Engineers San Antonio Area Office, he supervised construction of a dental clinic and the U. S. Army Pentathlon Center Competition Obstacle Course.

In 1983, Elliott began his career with Texas Instruments' Defense Systems, later acquired by Raytheon. He completed the mechanical design of the receiver for a terrain following radar upgrade. Since 1986, as a member of the Thermal Design

Group, he has focused on thermal design, analysis, development, and test of electronics systems including radar, electro-optic, and processor systems. Designs successfully operate in environments and platforms ranging from handheld units, stationary platforms, ground vehicles, various aircraft, ships, and space. He holds 12 issued U.S. Patents and has authored 30 peer-reviewed articles and numerous professional presentations. He retired from his parallel U.S. Army Reserve career in 2007 as a Colonel and received the Legion of Merit.

Elliott has served in ASME leadership roles and committees in the North Texas Section, Region X, District E, the Heat Transfer Division's K-16 Committee on Heat Transfer in Electronics Systems, and the Early Career Engineer Program Committee. While District E Leader, he worked with student and professional members in nine States from Texas to Utah plus Mexico. He is an ASME Fellow and received the ASME Dedicated Service Award. Elliott has served as chair of the AIAA Thermophysics Technical Committee and served as Technical Program Chair for AIAA conferences in 2003 and 2011. He is an AIAA Associate Fellow. He has also served as a director of the TSPE Dallas Chapter.

Elliott and Carol enjoy their family, UT athletics, and travel. He has continued support for the ME Department as a member of the Visiting Committee (2000-03), through gifts, and by helping to organize the Mechanical Engineering Academy of Distinguished Alumni.